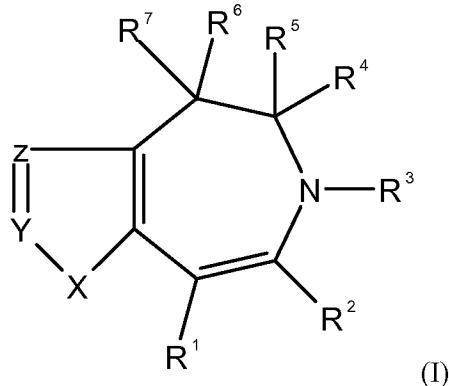


Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A compound having the formula (I):



wherein:

X is NR⁹, O or S(O)_t (where t is 0 to 2);

Y is CR³⁰ or N;

Z is CR³¹ or N;

R³⁰ and R³¹ are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR³², -SR³², -N(R³³)R³⁴, -N(R³³)S(O)₂R²³; -N(R³⁵)N(R³³)R³⁴, -N(R³⁵)N(R³³)S(O)₂R²³, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³; or

R³⁰ and R³¹ together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally substituted heteroaryl ring, or optionally substituted aryl with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above,

R^1 and R^2 are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, - OR^{14} , - SR^{14} , - $N(R^{15})R^{16}$, - $N(R^{15})S(O)_2R^{23}$; - $N(R^{17})N(R^{15})R^{16}$, - $N(R^{17})N(R^{15})S(O)_2R^{23}$, - $C(O)R^{18}$, - $C(O)OR^{14}$, - $C(S)OR^{14}$, - $C(O)SR^{14}$, - $C(O)N(R^{15})R^{16}$, - $C(O)N(R^{15})S(O)_2R^{23}$, - $C(O)N(R^{15})N=R^{16}$, - $C(O)N(R^{17})N(R^{15})R^{16}$ and - $C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$;

R^3 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted heteroaralkyl, - $C(O)R^{10}$, - $C(O)OR^{10}$, - $S(O)_2R^{10}$, - $C(O)N(R^{11})R^{12}$, - $C(O)N(R^{11})S(O)_2R^{23}$, - $C(O)N(R^{13})N(R^{11})R^{12}$, - $C(O)N(R^{13})N(R^{11})S(O)_2R^{23}$, - $N(R^{13})C(O)R^{10}$, - $N(R^{13})C(O)N(R^{11})R^{12}$, - $N(R^{13})C(O)N(R^{11})S(O)_2R^{23}$, - $N(R^{10})C(O)N(R^{13})N(R^{11})R^{12}$, - $N(R^{10})C(O)N(R^{13})N(R^{11})S(O)_2R^{23}$, - $N(R^{13})C(O)OR^{10}$, - $P(O)OR^{10}$, or - $P(O)(OR^{19})OR^{12}$;

R^4 , R^5 , R^6 and R^7 are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, - OR^{14} , - SR^{14} , - $S(O)_2R^{14}$, - $N(R^{15})R^{16}$, - $N(R^{15})S(O)_2R^{23}$, - $N(R^{15})C(O)R^{23}$, - $C(O)R^{18}$, - $C(O)OR^{20}$, - $C(O)N(R^{21})R^{22}$, - $C(O)N(R^{21})S(O)_2R^{23}$; - $C(O)N(R^{24})N(R^{21})R^{22}$ and - $C(O)N(R^{24})N(R^{21})S(O)_2R^{23}$; or

R^6 and R^7 together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R^6 and R^7 , together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R^4 and R^5 are as described above; or

R⁴ and R⁵ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁴ and R⁵, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁶ and R⁷ are as described above; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁴ and R⁵, together with the carbon atom to which they are attached, and R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring or an optionally substituted cycloalkenyl ring;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸, -C(O)OR²⁰ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) above;

R²⁰, R²¹, R²² and R²⁴ are selected as in (a) or (b) as follows: (a) R²⁰, R²¹, R²² and R²⁴ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R²¹ and R²², together with the nitrogen

atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R²⁰, R²¹, R²² and R²⁴ are selected as in (a) above;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of R¹-R²⁴-R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, and R²⁴ and R³⁰-R³⁶-R³⁰, R³¹, R³², R³³, R³⁴, R³⁵ and R³⁶, when substituted, are substituted with one or more substituents, each independently selected from Q¹;

each Q¹ is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyanato, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q¹ groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q¹ is independently substituted or unsubstituted with one or more substituents each independently selected from Q²;

each Q² is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyanato, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q² groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR⁷⁰;

each R⁶⁰ is independently a direct bond or alkylene;

each R⁷⁰ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclalkyl or heteroaralkyl;

each R⁷¹ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclalkyl, heteroaralkyl, -OR⁷² or -N(R⁷³)R⁷⁴;

R⁷², R⁷³ and R⁷⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁷³ and R⁷⁴, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁷⁵ and R⁷⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclalkyl; or

R⁷⁵ and R⁷⁶, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

each R⁷⁷ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁷⁸ is alkyl, heteroaryl, heterocyclyl, aryl, -OR⁷⁹ or -N(R⁸⁰)R⁸¹;

R⁷⁹ is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁸⁰ and R⁸¹ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁸⁰ and R⁸¹, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁸² is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR⁸³; and

each R⁸³ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; or as a solvate or polymorph; or as a prodrug; or as a pharmaceutically acceptable salt thereof.

2. (Currently amended) A compound of claim 1, wherein:

R¹ is -C(O)R¹⁸, -C(O)OR¹⁴, -C(S)OR¹⁴, -C(O)SR¹⁴, -C(O)N(R¹⁵)R¹⁶, -C(O)N(R¹⁵)S(O)₂R²³, -C(O)N(R¹⁵)N=R¹⁶, -C(O)N(R¹⁷)N(R¹⁵)R¹⁶ or -C(O)N(R¹⁷)N(R¹⁵)S(O)₂R²³;

~~wherein R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R²³ are described in Claim 1.~~

3. (Currently amended) The compound of claim 2, wherein R³ is -C(O)R¹⁰, -C(O)OR¹⁰, -S(O)₂R¹⁰ or -C(O)N(R¹¹)R¹²;
~~wherein R¹⁰, R¹¹ and R¹² are described in Claim 1.~~
4. (Original) The compound of claim 3 wherein R² is hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl or optionally substituted alkynyl.
- 5 (Original) The compound of Claim 4 wherein R⁴, R⁵, R⁶ and R⁷ are selected from a), b), c), d), e), f), g), h) and i) below:
- a) R⁴ and R⁵ are each independently hydrogen or halo and R⁶ and R⁷ are optionally substituted alkyl;
 - b) R⁶ and R⁷ are each independently hydrogen or halo and R⁴ and R⁵ are optionally substituted alkyl;
 - c) R⁴, R⁵, R⁶ and R⁷ are each optionally substituted alkyl;
 - d) R⁴ and R⁵ are each independently hydrogen or halo and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring.
 - e) R⁴ and R⁵ are optionally substituted alkyl and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring
 - f) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R⁶ and R⁷ are each independently hydrogen or halo;
 - g) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R⁶ and R⁷ are optionally substituted alkyl;
 - h) R⁴ and R⁵, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring and R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring; and
 - i) R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo.

6. (Original) The compound of claim 5 wherein:

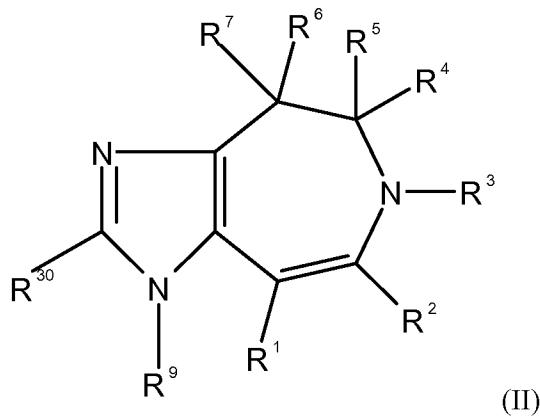
Y is CR³⁰; and

R^{30} is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, $-OR^{32}$, $-SR^{32}$, $-N(R^{33})R^{34}$, $-N(R^{33})S(O)_2R^{23}$; $-N(R^{35})N(R^{33})R^{34}$, $-N(R^{35})N(R^{33})S(O)_2R^{23}$, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ or $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

7. (Currently amended) A compound of claim 6 having the formula (II):



or a pharmaceutically acceptable derivative salts, esters, enol ethers, enol esters, acetals, ketals, orthoesters, hemiacetals, hemiketals, acids, and bases, thereof wherein:

R^1 is $-C(O)OR^{14}$; $-C(S)OR^{14}$, $-C(O)SR^{14}$, $-C(O)N(R^{15})R^{16}$, $-C(O)N(R^{15})S(O)_2R^{23}$, $-C(O)N(R^{15})N=R^{16}$, $-C(O)N(R^{17})N(R^{15})R^{16}$ and $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$;

R^2 is hydrogen, halo or optionally substituted alkyl;
 R^3 is $-C(O)R^{10}$;
 R^4 and R^5 are each independently hydrogen or halo; or
 R^4 and R^5 are each optionally substituted alkyl;
 R^6 and R^7 are each independently hydrogen or halo; or
 R^6 and R^7 are each optionally substituted alkyl; or
 R^6 and R^7 together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring or an optionally substituted cycloalkenyl ring;

R^9 is hydrogen, optionally substituted alkyl, $-C(O)R^{18}$, or $-S(O)_2R^{23}$;
 R^{10} is an optionally substituted aryl or an optionally substituted heteroaryl;
 R^{14} , R^{15} , R^{16} , R^{17} and R^{18} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

R^{30} is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, $-OR^{32}$, $-SR^{32}$, $-N(R^{33})R^{34}$, $-N(R^{33})S(O)_2R^{23}$, $-N(R^{35})N(R^{33})R^{34}$, $-N(R^{35})N(R^{33})S(O)_2R^{23}$, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ or $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$.

8. (Original) The compound of Claim 7 wherein:

R^4 , R^5 , R^6 and R^7 are each independently hydrogen or halo; and
 R^{30} is selected from the group consisting of hydrogen, halo, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

9. (Original) The compound of Claim 8 wherein said compound is

6-(4-fluoro-benzoyl)-3,6,7,8-tetrahydro-imidazo[4,5-d] azepine-4-carboxylic acid ethyl ester.

10. (Original) The compound of Claim 7 wherein:

R^4 and R^5 are each independently hydrogen or halo; and

R^6 and R^7 are optionally substituted alkyl; or

R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

11. (Original) The compound of Claim 10 wherein

R^2 is hydrogen, halo or optionally substituted alkyl; and

R^9 is hydrogen.

12. (Original) The compound of Claim 11 wherein R^{30} is selected from the group consisting of
-C(O) R^{36} , -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R^{33})R³⁴, -C(S)N(R^{33})R³⁴,
-C(O)N(R^{33})S(O)₂ R^{23} , -C(S)N(R^{33})S(O)₂ R^{23} , -C(O)N(R^{35})N(R^{33})R³⁴, -C(S)N(R^{35})N(R^{33})R³⁴ and
-C(O)N(R^{35})N(R^{33})S(O)₂ R^{23} ;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted

alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

13. (Original) The compound of Claim 12 wherein R¹ is -C(O)OCH₂CH₃, -C(O)OCH₃, -C(O)OCH(CH₃)₂, -C(O)OH, -C(O)OCH₂CH₂CH₃, -C(O)NHCH₃, -C(O)NHCH₂CH₃, -C(O)NHCH(CH₃)₂, -C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl), -C(O)NCH(CH₃)(CH₂CH₃) or -C(O)N(CH₃)(cyclopropyl).

14. (Original) The compound of Claim 6 wherein:

Z is CR³¹; and

R³¹ is independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, -OR³², -SR³², -N(R³³)R³⁴, -N(R³³)S(O)₂R²³; -N(R³⁵)N(R³³)R³⁴, -N(R³⁵)N(R³³)S(O)₂R²³, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

15. (Original) The compound of Claim 14 wherein:

Z is CR³¹; and

R^{31} is independently selected from a group consisting of optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

16. (Original) The compound of Claim 14 wherein X is O or $S(O)_t$ (where t is 0 to 2).
17. (Original) The compound of Claim 16 wherein R^4 , R^5 , R^6 and R^7 are each independently hydrogen or halo; and

R^{30} is selected from the group consisting of hydrogen, halo, $-C(O)R^{36}$, $-C(O)OR^{32}$, $-C(S)OR^{32}$, $-C(O)SR^{32}$, $-C(O)N(R^{33})R^{34}$, $-C(S)N(R^{33})R^{34}$, $-C(O)N(R^{33})S(O)_2R^{23}$, $-C(S)N(R^{33})S(O)_2R^{23}$, $-C(O)N(R^{35})N(R^{33})R^{34}$, $-C(S)N(R^{35})N(R^{33})R^{34}$ and $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$;

where R^{23} is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) or (b) as follows: (a) R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R^{33} and R^{34} , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R^{32} , R^{33} , R^{34} , R^{35} and R^{36} are selected as in (a) above.

heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

18. (Original) The compound of Claim 17 wherein said compound is

6-(3,4-difluoro-benzoyl)-5,6-dihydro-4H-thieno[2,3-d] azepine-8-carboxylic acid ethyl ester.

19. (Original) The compound of Claim 16 wherein:

R⁴ and R⁵ are each independently hydrogen or halo; and

R⁶ and R⁷ are optionally substituted alkyl; or

R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

20. (Original) The compound of Claim 19 wherein:

R² is hydrogen, halo or optionally substituted alkyl; and

R⁹ is hydrogen.

21. (Original) The compound of Claim 20 wherein R³⁰ is selected from the group consisting of -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

22. (Original) The compound of Claim 21 wherein R¹ is -C(O)OCH₂CH₃, -C(O)OCH₃, -C(O)OCH(CH₃)₂, -C(O)OH, -C(O)OCH₂CH₂CH₃, -C(O)NHCH₃, -C(O)NHCH₂CH₃, -C(O)NHCH(CH₃)₂,

-C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl), -C(O)NCH(CH₃)(CH₂CH₃) or
-C(O)N(CH₃)(cyclopropyl); and

R³ is -C(O)R¹⁰ wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

23. (Currently amended) The compound of Claim 22 wherein said compound is

6-(3,4-difluoro-benzoyl)-4,4-dimethyl-5,6-dihydro-4H-thieno[2,3-d]azepine-8-carboxylic acid ethyl ester; or,

24. (Original) The compound of Claim 14 wherein

X is NR⁹;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸ or -S(O)₂R²³; and
R¹⁸ and R²³ each independently optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocycl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl.

25. (Original) The compound of Claim 24 wherein:

R⁴ and R⁵ are each independently hydrogen or halo; and

R⁶ and R⁷ are optionally substituted alkyl; or

R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

26. (Original) The compound of Claim 25 wherein:

R² is hydrogen, halo or optionally substituted alkyl; and

R⁹ is hydrogen.

27. (Original) The compound of Claim 26 wherein R³⁰ is selected from the group consisting of -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocycl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

28. (Original) The compound of Claim 27 wherein R¹ is -C(O)OCH₂CH₃, -C(O)OCH₃, -C(O)OCH(CH₃)₂, -C(O)OH, -C(O)OCH₂CH₂CH₃, -C(O)NHCH₃, -C(O)NHCH₂CH₃, -C(O)NHCH(CH₃)₂, -C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl), -C(O)NCH(CH₃)(CH₂CH₃) or -C(O)N(CH₃)(cyclopropyl); and

R³ is -C(O)R¹⁰ wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

29. (Original) The compound of Claim 28 wherein said compound is selected from the group consisting of:

6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid diethyl ester; and

6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.

30. (Original) The compound of Claim 29 wherein:

R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo; and

R³⁰ is selected from the group consisting of hydrogen, halo, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³;

where R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted

aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above.

31. (Original) The compound of Claim 30 wherein said compound is

6-(3,4-difluoro-benzoyl)-1,4,4-trimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.

32. (Original) The compound of Claim 5 wherein:

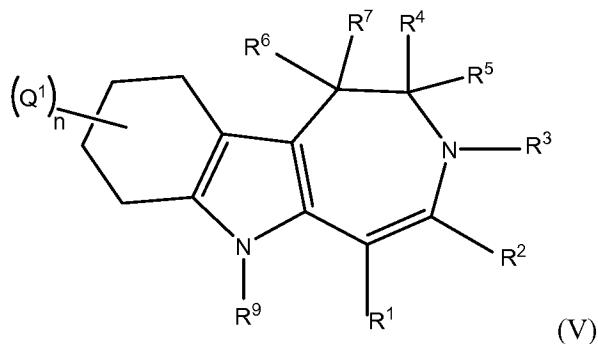
Y is CR³⁰;

Z is CR³¹; and

R³⁰ and R³¹ together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally substituted heteroaryl ring or optionally substituted aryl ring with the exception of substituted or unsubstituted phenyl and substituted or unsubstituted naphthyl.

33. (Original) The compound of claim 32 wherein said optionally substituted cycloalkyl ring is optionally substituted cyclopentyl, optionally substituted cyclohexyl, optionally substituted cycloheptyl or optionally substituted cyclooctyl.

34. (Currently amended) A compound having the formula (V):



or a pharmaceutically acceptable salt, esters, enol ethers, enol esters, acetals, ketals, orthoesters, hemiacetals, hemiketals, acids, and bases, thereof ~~derivative~~ thereof, wherein:

n is 0 to 8;

R¹ and R² are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl,

optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³; -N(R¹⁷)N(R¹⁵)R¹⁶, -N(R¹⁷)N(R¹⁵)S(O)₂R²³, -C(O)R¹⁸, -C(O)OR¹⁴, -C(S)OR¹⁴, -C(O)SR¹⁴, -C(O)N(R¹⁵)R¹⁶, -C(O)N(R¹⁵)S(O)₂R²³, -C(O)N(R¹⁵)N=R¹⁶, -C(O)N(R¹⁷)N(R¹⁵)R¹⁶ and -C(O)N(R¹⁷)N(R¹⁵)S(O)₂R²³;

R³ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted heteroaralkyl, -C(O)R¹⁰, -C(O)OR¹⁰, -S(O)₂R¹⁰, -C(O)N(R¹¹)R¹², -C(O)N(R¹¹)S(O)₂R²³, -C(O)N(R¹³)N(R¹¹)R¹², -C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)R¹⁰, -N(R¹³)C(O)N(R¹¹)R¹², -N(R¹³)C(O)N(R¹¹)S(O)₂R²³, -N(R¹⁰)C(O)N(R¹³)N(R¹¹)R¹², -N(R¹⁰)C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)OR¹⁰, -P(O)OR¹⁰, or -P(O)(OR¹⁹)OR¹²;

R⁴, R⁵, R⁶ and R⁷ are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -S(O)₂R¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁵)C(O)R²³, -C(O)R¹⁸, -C(O)OR²⁰, -C(O)N(R²¹)R²², -C(O)N(R²¹)S(O)₂R²³; -C(O)N(R²⁴)N(R²¹)R²² and -C(O)N(R²⁴)N(R²¹)S(O)₂R²³; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁶ and R⁷ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁴ and R⁵ are as described above;

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted

heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) above;

R²⁰, R²¹, R²² and R²⁴ are selected as in (a) or (b) as follows: (a) R²⁰, R²¹, R²² and R²⁴ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R²¹ and R²², together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R²⁰, R²¹, R²² and R²⁴ are selected as in (a) above;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, and R²⁴⁺R²⁴-, when substituted, are substituted with one or more substituents, each independently selected from Q¹;

each Q¹ is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q¹ groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q¹ is independently substituted or unsubstituted with one or more substituents each independently selected from Q²;

each Q² is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyanato, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q² groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR⁷⁰;

each R⁶⁰ is independently a direct bond or alkylene;

each R⁷⁰ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R⁷¹ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, -OR⁷² or -N(R⁷³)R⁷⁴;

R⁷², R⁷³ and R⁷⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁷³ and R⁷⁴, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁷⁵ and R⁷⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

R⁷⁵ and R⁷⁶, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

each R⁷⁷ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁷⁸ is alkyl, heteroaryl, heterocyclyl, aryl, -OR⁷⁹ or -N(R⁸⁰)R⁸¹;

R^{79} is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R^{80} and R^{81} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R^{80} and R^{81} , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R^{82} is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR⁸³; and

each R^{83} is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl.

35. (Original) The compound of Claim 34 wherein:

R^3 is -C(O)R¹⁰;

wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

36. (Original) The compound of Claim 35 wherein:

R^1 is -C(O)R¹⁸, -C(O)OR¹⁴ or -C(O)N(R¹⁵)R¹⁶, where R¹⁴ and R¹⁵ are optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted heterocyclyl, R¹⁶ is hydrogen, and R¹⁸ is optionally substituted alkyl.

37. (Original) The compound of Claim 36 wherein:

R^2 is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl or optionally substituted heteroaralkyl.

38. (Original) The compound of Claim 37 wherein:

R^2 is hydrogen, halo or optionally substituted alkyl; and

R^9 is hydrogen or optionally substituted alkyl.

39. (Original) The compound of Claim 38 wherein R⁴, R⁵, R⁶ and R⁷ are selected from a), b), c), d), e), f), g) and h) below:

a) R⁴ and R⁵ are each independently hydrogen or halo and R⁶ and R⁷ are optionally substituted alkyl;

- b) R^6 and R^7 are each independently hydrogen or halo and R^4 and R^5 are optionally substituted alkyl;
- c) R^4 , R^5 , R^6 and R^7 are each optionally substituted alkyl;
- d) R^4 and R^5 are each independently hydrogen or halo and R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring.
- e) R^4 and R^5 are optionally substituted alkyl and R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring
- f) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R^6 and R^7 are each independently hydrogen or halo;
- g) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R^6 and R^7 are optionally substituted alkyl;
- h) R^4 and R^5 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring and R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring; and
- i) R^4 , R^5 , R^6 and R^7 are each independently hydrogen or halo.

40. (Original) The compound of Claim 39 wherein:

R^4 and R^5 are each independently hydrogen or halo; and
 R^6 and R^7 are optionally substituted alkyl; or
 R^6 and R^7 , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

41. (Original) The compound of Claim 40 wherein:

R^2 is hydrogen, halo or optionally substituted alkyl; and
 R^9 is hydrogen.

42. (Currently amended) The compound of Claim 41-34 wherein R^1 is $-C(O)OCH_2CH_3$, $-C(O)OCH_3$, $-C(O)OCH(CH_3)_2$, $-C(O)OH$, $-C(O)OCH_2CH_2CH_3$, $-C(O)NHCH_3$, $-C(O)NHCH_2CH_3$, $-C(O)NHCH(CH_3)_2$, $-C(O)NH(cyclopropyl)$, $-C(O)NH(cyclopentyl)$, $-C(O)NCH(CH_3)(CH_2CH_3)$ or $-C(O)N(CH_3)(cyclopropyl)$; and

R² is hydrogen, halo or optionally substituted alkyl;

R³ is -C(O)R¹⁰ wherein R¹⁰ is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl;

R⁴ and R⁵ are each independently hydrogen or halo; and

R⁶ and R⁷ are optionally substituted alkyl; or

R⁶ and R⁷, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl ring.

R⁹ is hydrogen.

43. (Original) The compound of Claim 42 wherein said compound is

3-(4-fluoro-benzoyl)-1,1-dimethyl-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.

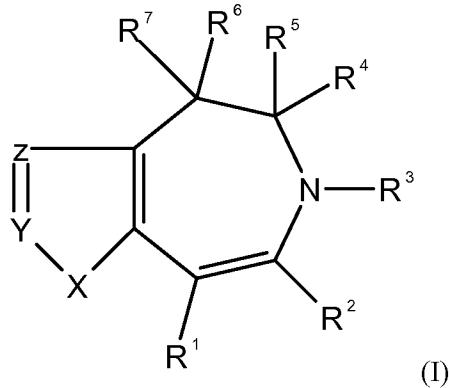
44. (Original) The compound of Claim 39 wherein R⁴, R⁵, R⁶ and R⁷ are each independently hydrogen or halo.

45. (Currently amended) The compound of Claim 44 wherein said compound is

~~3-(4-fluoro-benzoyl)-1,2,3,4,5,6,7,8,9,10-decahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester or~~

3-(4-fluoro-benzoyl)-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.

46. (Currently amended) A pharmaceutical composition comprising a pharmaceutical carrier or vehicle and a compound having the formula (I):



wherein:

X is NR⁹, O or S(O)_t (where t is 0 to 2);

Y is CR³⁰ or N;

Z is CR³¹ or N;

R³⁰ and R³¹ are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR³², -SR³², -N(R³³)R³⁴, -N(R³³)S(O)₂R²³; -N(R³⁵)N(R³³)R³⁴, -N(R³⁵)N(R³³)S(O)₂R²³, -C(O)R³⁶, -C(O)OR³², -C(S)OR³², -C(O)SR³², -C(O)N(R³³)R³⁴, -C(S)N(R³³)R³⁴, -C(O)N(R³³)S(O)₂R²³, -C(S)N(R³³)S(O)₂R²³, -C(O)N(R³⁵)N(R³³)R³⁴, -C(S)N(R³⁵)N(R³³)R³⁴ and -C(O)N(R³⁵)N(R³³)S(O)₂R²³; or

R³⁰ and R³¹ together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted cycloalkenyl ring, optionally substituted cycloalkynyl ring, optionally substituted heterocyclyl ring, optionally substituted heteroaryl ring, or optionally substituted aryl with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) or (b) as follows: (a) R³², R³³, R³⁴, R³⁵ and R³⁶ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R³³ and R³⁴, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R³², R³³, R³⁴, R³⁵ and R³⁶ are selected as in (a) above,

R¹ and R² are each independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³; -N(R¹⁷)N(R¹⁵)R¹⁶, -N(R¹⁷)N(R¹⁵)S(O)₂R²³, -C(O)R¹⁸, -C(O)OR¹⁴, -C(S)OR¹⁴, -C(O)SR¹⁴, -C(O)N(R¹⁵)R¹⁶, -C(O)N(R¹⁵)S(O)₂R²³, -C(O)N(R¹⁵)N(R¹⁷)R¹⁶, -C(O)N(R¹⁷)N(R¹⁵)R¹⁶ and -C(O)N(R¹⁷)N(R¹⁵)S(O)₂R²³;

R³ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heterocyclyl,

optionally substituted heteroaralkyl, -C(O)R¹⁰, -C(O)OR¹⁰, -S(O)₂R¹⁰, -C(O)N(R¹¹)R¹², -C(O)N(R¹¹)S(O)₂R²³, -C(O)N(R¹³)N(R¹¹)R¹², -C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)R¹⁰, -N(R¹³)C(O)N(R¹¹)R¹², -N(R¹³)C(O)N(R¹¹)S(O)₂R²³, -N(R¹⁰)C(O)N(R¹³)N(R¹¹)R¹², -N(R¹⁰)C(O)N(R¹³)N(R¹¹)S(O)₂R²³, -N(R¹³)C(O)OR¹⁰, -P(O)OR¹⁰, or -P(O)(OR¹⁹)OR¹²;

R⁴, R⁵, R⁶ and R⁷ are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocycll, optionally substituted aralkyl, optionally substituted heteroaralkyl, -OR¹⁴, -SR¹⁴, -S(O)₂R¹⁴, -N(R¹⁵)R¹⁶, -N(R¹⁵)S(O)₂R²³, -N(R¹⁵)C(O)R²³, -C(O)R¹⁸, -C(O)OR²⁰, -C(O)N(R²¹)R²², -C(O)N(R²¹)S(O)₂R²³; -C(O)N(R²⁴)N(R²¹)R²² and -C(O)N(R²⁴)N(R²¹)S(O)₂R²³; or

R⁶ and R⁷ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁴ and R⁵ are as described above; or

R⁴ and R⁵ together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R⁴ and R⁵, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R⁶ and R⁷ are as described above; or

R⁴ and R⁵, or R⁴ and R⁶, or R⁴ and R⁷, or R⁵ and R⁶, or R⁵ and R⁷, or R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocycll ring, an optionally substituted cycloalkenyl ring or together form a double bond, and the others of R⁴, R⁵, R⁶ and R⁷ are as described above; or R⁴ and R⁵, together with the carbon atom to which they are attached, and R⁶ and R⁷, together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocycll ring or an optionally substituted cycloalkenyl ring.

R⁹ is hydrogen, optionally substituted alkyl, -C(O)R¹⁸, -C(O)OR²⁰ or -S(O)₂R²³;

R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a) or (b) as follows: (a) R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocycll, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹¹ and R¹² or R¹² and R¹⁹, together with the atoms to which they are attached, form an optionally substituted heterocycll ring or an

optionally substituted heteroaryl ring; and the others of R¹⁰, R¹¹, R¹², R¹³ and R¹⁹ are selected as in (a), above;

R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) or (b) as follows: (a) R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R¹⁵ and R¹⁶, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are selected as in (a) above;

R²⁰, R²¹, R²² and R²⁴ are selected as in (a) or (b) as follows: (a) R²⁰, R²¹, R²² and R²⁴ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R²¹ and R²², together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R²⁰, R²¹, R²² and R²⁴ are selected as in (a) above;

R²³ is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

each of R¹-R²⁴ and R³⁰-R³⁶, when substituted, are substituted with one or more substituents, each independently selected from Q¹;

each Q¹ is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q¹ groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each Q¹ is independently substituted or unsubstituted with one or more substituents each independently selected from Q²;

each Q² is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thiocyno, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR⁷⁰, -SR⁷⁰, -R⁶⁰-C(J)R⁷¹, -R⁶⁰-N(R⁷⁰)C(J)R⁷¹, -OC(O)R⁷¹, -R⁶⁰-N(R⁷⁵)(R⁷⁶), -N⁺(R⁷⁷)₃, -P(R⁷⁸)₂, -P(O)(R⁷⁸)₂, -OP(O)(R⁷⁸)₂, -N(R⁷⁰)S(O)₂R⁷¹, -S(O)₂R⁷¹, -S(O)R⁸², -OS(O)R⁸³, -OS(O)₂R⁸³ or -Si(R⁸³)₃;

two Q² groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR⁷⁰;

each R⁶⁰ is independently a direct bond or alkylene;

each R⁷⁰ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R⁷¹ is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, -OR⁷² or -N(R⁷³)R⁷⁴;

R⁷², R⁷³ and R⁷⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁷³ and R⁷⁴, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁷⁵ and R⁷⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

R⁷⁵ and R⁷⁶, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

each R⁷⁷ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁷⁸ is alkyl, heteroaryl, heterocyclyl, aryl, -OR⁷⁹ or -N(R⁸⁰)R⁸¹;

R⁷⁹ is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R⁸⁰ and R⁸¹ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R⁸⁰ and R⁸¹, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R⁸² is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR⁸³; and

each R⁸³ is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; ~~or as a solvate or polymorph; or as a prodrug; or as a pharmaceutically acceptable salt thereof.~~

47. (canceled)

48. (Currently amended) A method of treating or ameliorating one or more symptoms of a disease or disorder ~~The method of claim 47,~~ wherein the disease or disorder is selected from hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, dyslipidemia, lipodystrophy, atherosclerosis, atherosclerotic disease, atherosclerotic disease events, atherosclerotic cardiovascular disease, Syndrome X, diabetes mellitus, type II diabetes, insulin insensitivity, hyperglycemia, cholestasis and obesity comprising administering to a subject in need thereof an effective amount of a compound or composition of any one claims 1-46.